REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow.

Claims 1-8 and 12 are requested to be cancelled.

Claims 7, 9-11, and 13-14 are currently being amended. Claims 7 and 9 were rewritten in independent form.

Claims 21-35 are being added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

After amending the claims as set forth above, Claims 7, 9-11, and 13-35 are now pending in this application.

Related Application

U.S. Patent Application 09/915,672 is based on a similar description as the present application, but is directed to alternate aspects of the application. U.S. Patent Application 09/915,672 is being handled by Frances P. Oropeza in the same art unit as the present application. Applicants have also filed a supplemental IDS with this response.

Claims 7, 9-11, and 13-14

Claims 7 and 9 have rewritten in independent form. Claims 10-11, and 13 have been rewritten to depend from Claim 9. Claim 13 is rewritten to recite an electrocardiograph (the instrument) rather than an electrocardiogram (the graphic made by the device). Claim 14 is reworded to more positively recite some elements.

Rejection of Claims 1-5, 8, 9, and 19 under 35 U.S.C. § 112, second paragraph

Claims 1-5, 8, 9, and 19 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1-5, and 8 have been cancelled. Claim 9 as amended and Claim 19 are believed to overcome the rejection.

Claim 9 - § 112

Claim 9 has been amended according to the examiner's suggestion, and is believed to overcome the rejection.

Claim 19 - § 112

Claim 19 was rejected, in section 1 of the Office Action, because it used both the terms "for providing" and "for controlling". Claim 19 has been amended to more clearly articulate the role of the third component. The third component both provides power and remotely controls power being supplied to a component for illuminating. For example, a component may selectively provide power to a second component, thereby controlling the power which it supplies. For one potential example of this, see the description of the power management circuit board 70 in paragraphs 28 and 32 of the present application.

Rejection of Claims 1-6, 8, 11, and 13 under 35 U.S.C. 102(b) over Mitchell et al.

In section 4 of the Office Action, Claims 1-6, 8, 11, and 13 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,590,648 to Mitchell et al. Claims 1-6, and 8 have been cancelled. Claims 11 and 13 have been rewritten to depend from Claim 9 which contains elements not taught or suggested by Mitchell et al., and which was not rejected over Mitchell et al. in the Office Action.

Rejection of Claims 1-18 and 20 under 35 U.S.C. 102(b) over Feng et al.

In section 5 of the Office Action, Claims 1-18 and 20 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,649,544 to Feng et al. Claims 1-6, 8, and 12 have been cancelled. Claims 7, 9, 14, and 20 are believed to overcome the rejections, for the reasons discussed below. Claims 10, 11, and 13 depend from Claim 9; and Claims 15-18

depend from Claim 14. The dependent claims are believed to overcome the rejections for at least the same reasons as the claims from which they depend.

Rejection of Claim 7 over Feng et al.

Feng et al. fails to teach each element found in Claim 7, therefore Feng et al. does not anticipate Claim 7. Claim 7 recites that "the illuminating component includes at least one LED". Feng et al. does not disclose that monitor 14 includes an LED. LEDs have particular advantages as discussed in paragraphs [0024-25] of the present application. Further, Claim 7 recites "an illuminating component that illuminates the work surface". It is not evident from Feng that monitor 14 would illuminate a work surface such that a clinician would be able to read material located on the work surface. Rather, light from monitor 14 is directed generally outwardly.

Rejection of Claim 9 over Feng et al.

Feng et al. fails to teach each element found in Claim 9, therefore Feng et al. does not anticipate Claim 9. Claim 9, as amended, recites "a light source, coupled to the instrument, that directs light toward the work surface to illuminate the work surface". Feng et al. does not teach an illuminating component that illuminates a work surface. Rather, light from monitor 14 is directed generally outwardly. Further, Claim 9 recites that the "light source... is adapted to illuminate the medium". In Feng et al., a medium printed by printer 16 is not illuminated by monitor 14. Further, there is no teaching or suggestion to position printer 16 in a location that would be illuminated by monitor 14. As discussed in the present application, for exercise stress tests, the medium containing the graphical waveform representing the electrical activity of the heart of the patient is generally what the clinician reviews while the echo stress test is being conducted. Thus, it is an important feature for the embodiment claimed in Claim 9 that the light source illuminates the medium such that a clinician may interpret the waveform that is printed on the medium.

Rejection of Claim 14 over Feng et al.

Feng et al. fails to teach each element found in Claim 14, therefore Feng et al. does not anticipate Claim 14. Claim 14 recites "a printing component configured to print on a medium, moving across the work surface." Printer 16 does not produce a medium that moves across the keyboard of Feng et al. Further, there is no teaching or suggestion to create such an arrangement. Additionally, Claim 14 recites "an illuminating component that illuminates the work surface" (which includes the medium). As discussed previously, a medium of printer 16 of Feng et al. would not be illuminated by monitor 14. Even more, Claim 14 recites "an instrument including... a power source coupled to the printing component...[and coupled to] an illuminating component." Feng et al. does not show an instrument having a power source connected to both a printing component and to an illuminating component.

Rejection of Claim 20 over Feng et al.

Feng et al. fails to teach each element found in Claim 20, therefore Feng et al. does not anticipate Claim 20. See, at a minimum, the reasons discussed above for Claims 9 and 14. Specifically, Feng et al. does not teach an instrument having "a power source coupled to the means for printing; and means coupled to the power source for illuminating the work surface."

Rejection of Claims 1-13 and 19 under 35 U.S.C. 102(b) over Halpern et al.

In section 6 of the Office Action, Claims 1-13 and 19 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,687,717 to Halpern et al. Claims 1-6, 8, and 12 were cancelled. Claims 7, 9 and 19 are believed to overcome the rejections, as discussed below. Claims 10, 11, and 13 depend from Claim 9 and are believed to overcome the rejections for at least the same reasons as Claim 9.

Rejection of Claim 7 over Halpern et al.

Halpern et al. fails to teach each element found in Claim 7, therefore Halpern et al. does not anticipate Claim 7. Claim 7 recites that "the illuminating component includes at least one LED." The portable computer 22 includes a cathode ray tube display. Col. 5, lines 28-30. Further, there is no showing that the portable computer 22 illuminates a work surface. As discussed with respect to the rejection of Claim 7 over Feng et al., use of an LED is particularly advantageous for the invention as claimed in Claim 7.

Rejection of Claim 9 over Halpern et al.

Halpern et al. fails to teach each element found in Claim 9, therefore Halpern et al. does not anticipate Claim 9. Claim 9 recites that "the instrument includes a component adjacent the work surface for printing on a medium a graphical waveform representing the electrical activity of the heart." Halpern et al. does not disclose such a component. The Office Action cites Col. 8, lines 20-27 for this element. That section refers to a display, not a component that prints on a medium. Further, Halpern et al. fails to disclose "a light source, coupled to the instrument, that directs light toward the work surface to illuminate the work surface." One problem with relying on a monitor to provide sufficient light for a clinician to interpret a graphical waveform printed on a medium is that monitors are generally directed outwardly and any light that would fall on the medium would be generally insufficient for viewing the waveform on the medium.

Rejection of Claim 19 over Halpern et al.

Halpern et al. fails to teach each element found in Claim 19, therefore Halpern et al. does not anticipate Claim 19. Claim 19 recites "the instrument [includes]... a third component for providing power to the first component and the second component, the third component being capable of remotely controlling power to the first component." Halpern et al. does not teach or suggest the inclusion of a component to an instrument which provides power to a component for illuminating the instrument and a component for decoding user instructions, and which is capable of remotely controlling power to the component for illuminating.

Rejection of Claims 1-18 under 35 U.S.C. 102(b) over Mann et al.

In section 7 of the Office Action, Claims 1-18 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,833,623 to Mann et al. Claims 1-6, 8, and 12 have been cancelled. Claims 7, 9, and 14 are believed to overcome the rejections, as discussed below. Claims 10, 11, and 13 depend from Claim 9; and Claims 15-18 depend from Claim 14. The dependent claims are believed to overcome the rejections for at least the same reasons as the claims from which they depend.

Rejection of Claim 7 over Mann et al.

Mann et al. fails to teach each element found in Claim 7, therefore Mann et al. does not anticipate Claim 7. Claim 7, as amended, recites "a light source, coupled to the instrument, that directs light toward the work surface to illuminate the work surface; wherein the light source includes at least one LED". Mann does not teach a light source that directs light to a work surface and that includes an LED. Any light from monitor 126 would, at best, only incidentally strike the work surface.

Rejection of Claim 9 over Mann et al.

Mann et al. fails to teach each element found in Claim 9, therefore Mann et al. does not anticipate Claim 9. Claim 9 recites "an instrument [includes]... a component adjacent the work surface for printing on a medium a graphical waveform representing the electrical activity of the heart; and a light source that directs light toward the work surface to illuminate the work surface and is adapted to illuminate the medium." Mann et al. does not teach that the printer prints a graphical waveform representing the electrical activity of the heart. Further, any light from monitor 126 would, at best, only incidentally strike the work surface, rather than illuminating a medium printed by the printer.

Rejection of Claim 14 over Mann et al.

Mann et al. fails to teach each element found in Claim 14, therefore Mann et al. does not anticipate Claim 14. Claim 14 recites "an instrument including... a power source coupled to the printing component...[and coupled to] an illuminating component." Mann does not show a power source of an instrument connected to both a printing component of the instrument and to an illuminating component.

New Claims 21-26

New Claims 21-24 find support in at least the original specification at Figures 1 and 2, and the description of the relevant portions of those figures. New Claim 25 finds support in at least the original specification in Figure 3, and the description of the relevant portions of that figure (see paragraphs 24 and 25). New Claim 26 finds support in at least the original specification in Figure 5, and the description of the relevant portions of that figure (see paragraphs 26-33).

New Claim 21 recites that a medical stress testing system comprises a display and an illumination source. No cited reference includes a display in addition to an illumination source. Further, no cited reference teaches or suggests the arrangement of the printing component, the display, and the work surface as recited in the claim.

With respect to Claim 23, no reference teaches or suggests a display located above a work surface that meets the other criteria of the claim.

With respect to Claim 24, no reference teaches or suggests a support carrying both the display and the illumination source.

Claims 22, 25, and 26 are also believed to recite additional elements not found in or suggested by the prior art.

New Claims 27-32

New Claims 27-29 find support in at least the original specification at Figures 1 and 2, and the description of the relevant portions of those figures. New Claims 30-32 find support in at least the original specification in Figure 3, and the description of the relevant portions of that figure (see paragraphs 24 and 25).

New Claim 27 recites that a medical stress testing system includes an illumination source that illuminates a work surface and a support located above the work surface with a plate that can carry a display. No reference teaches or suggests this combination of features in a stress test instrument.

New Claim 29 recites that the illumination source is carried on a bottom surface of the plate of the support. None of the cited references are believed to teach or suggest this additional feature.

New Claim 31 recites that the illumination source includes a circuit board carrying a plurality of LEDs. None of the cited references are believed to teach or suggest this additional feature.

New Claims 28, 30, and 32 are also believed to recite additional elements not found in or suggested by the prior art.

New Claims 33-35

New Claims 33-35 find support in the original specification at Figure 3, and the description found at paragraphs [0024-25]. With respect to Claim 35, it is clear from Figure 3 that the light emitting diodes that generally form a bottom row of diodes are not in line with the diodes that generally form a top row of diodes.

Claims 33-35 depend from Claim 7 and are believed to be allowable for at least the same reasons as Claim 7.

With respect to Claim 33, no reference teaches or suggests using a plurality of LEDs to illuminate the work surface. Using a plurality of LEDs has allowed applicants to better meet the goals listed in paragraph [0024] of the present application.

With respect to Claims 34 and 35, no reference teaches or suggests mounting a plurality of LEDs on a circuit board, nor mounting the plurality of LEDs in a staggered arrangement.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2401. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to

Deposit Account No. 50-2401. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2401.

Respectfully submitted,

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